

FACT SHEET: *E. coli* O157:H7

Escherichia coli (*E. coli*) O157:H7 is one of many types of *E. coli* and a cause of diarrhea. Most *E. coli* species are harmless and live in the intestines (guts) of healthy humans and animal. The O157:H7 type, however, produces a powerful toxin that can cause severe illness. By one estimate, 10,000 to 20,000

Escherichia coli (*E. coli*) O157:H7 infections occur in the United States each year. Infections can be very mild (even asymptomatic) or very severe, even fatal. *E. coli* O157:H7 typically causes diarrhea, often bloody, and often with vomiting or severe stomach cramps. Fever is usually very mild or nonexistent. Illness typically lasts two to ten days.

In some persons, mostly young children, the infection can also cause hemolytic uremic syndrome, a kind of kidney failure. Hemolytic uremic syndrome is a life-threatening condition usually treated in an intensive care unit. Blood transfusions and kidney dialysis are often required. Some individuals may have permanent kidney and other problems.

Unfortunately, there is no one treatment that has been found to be effective against *E. coli* O157:H7, and it is possible that some antibiotics may increase the risk of problems. Anti-diarrheal agents, such as loperamide (Imodium®), should also be avoided. Some patients become dehydrated and may need IV fluids.

Bacteria in bowel movements of infected persons can be passed from one person to another if hand washing is poor. This is most common among toddlers who are not potty-trained. After a person gets over the illness, they can continue to shed (get rid of) the bacteria through their bowel movements for several more weeks or even months. Some people who shed this bacteria may not have had any symptoms of illness, so hand washing is always important even when someone is not sick. Common ways to avoid getting *E. coli* O157:H7 infections are as follows:

- Cook all meat thoroughly. Because ground beef can turn brown before disease-causing bacteria are killed, use a digital instant-read meat thermometer to ensure thorough cooking. Ground beef should be cooked until a thermometer reads at least 160°F. Do not eat ground beef patties that are still pink in the middle. Treat game meat (for example, venison) with the same care used for store-bought meat. Wash hands thoroughly after handling meat.
- Keep harmful bacteria out of your kitchen. Keep raw meat separate from ready-to-eat foods. Wash hands, counters, and utensils with hot soapy water after they touch raw meat. Never place cooked meat on the unwashed plate that held raw meat. Wash meat thermometers between testing of patties. Wash fruits and vegetables thoroughly, especially those that will not be cooked.
- Drink only pasteurized milk, juice, and cider.

- Don't eat sprouts. Alfalfa, clover, and other kinds of uncooked sprouts are well-recognized potential sources for this and similar bacteria.
- Don't drink water from rivers or streams unless it has been treated. Avoid swallowing lake or pool water while swimming. Don't let small children go into public swimming areas.
- To reduce the risk of spreading infection, wash your hands carefully with soap and water after changing diapers.

Adapted from Oregon Department of Human Services Web site